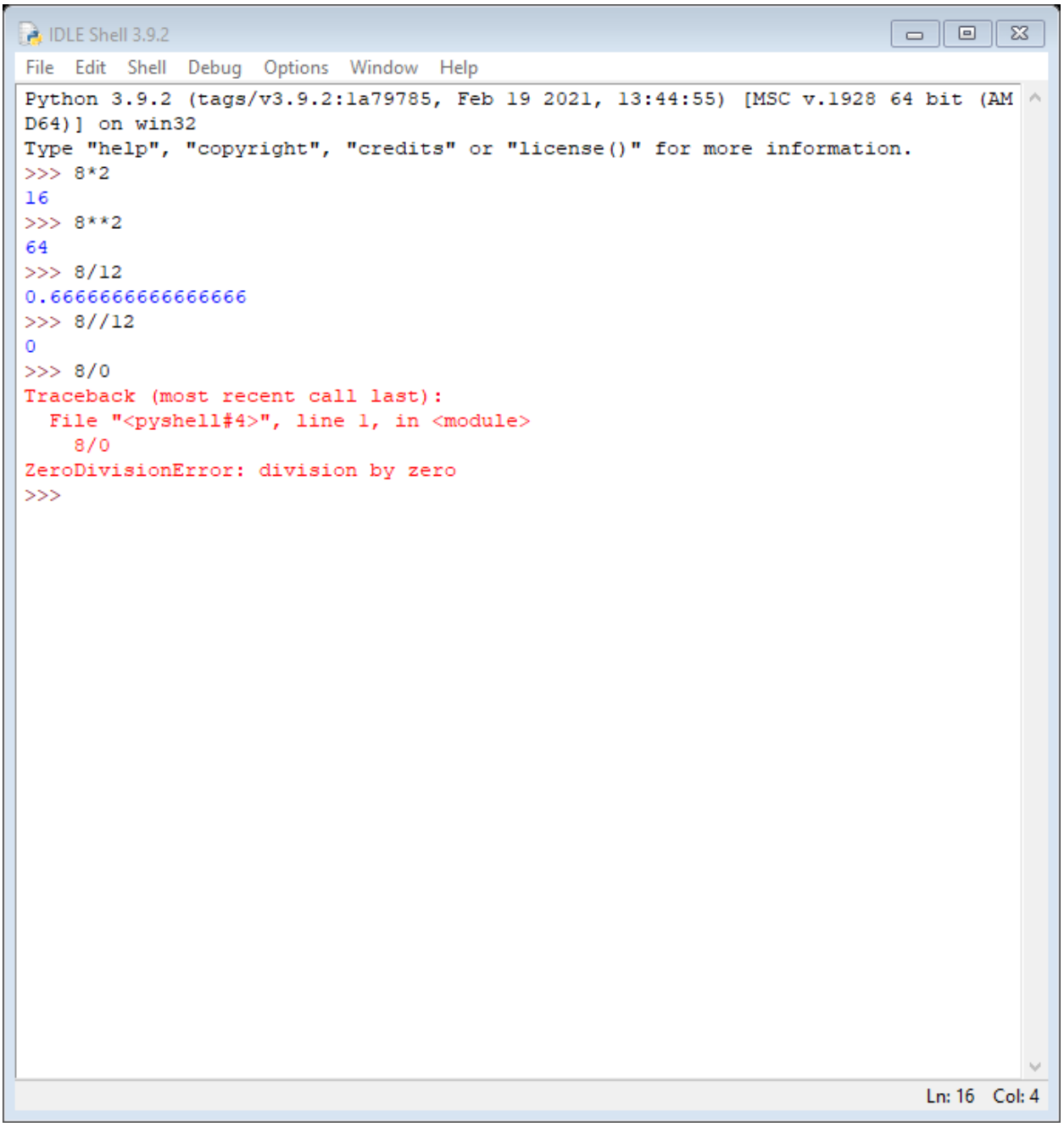
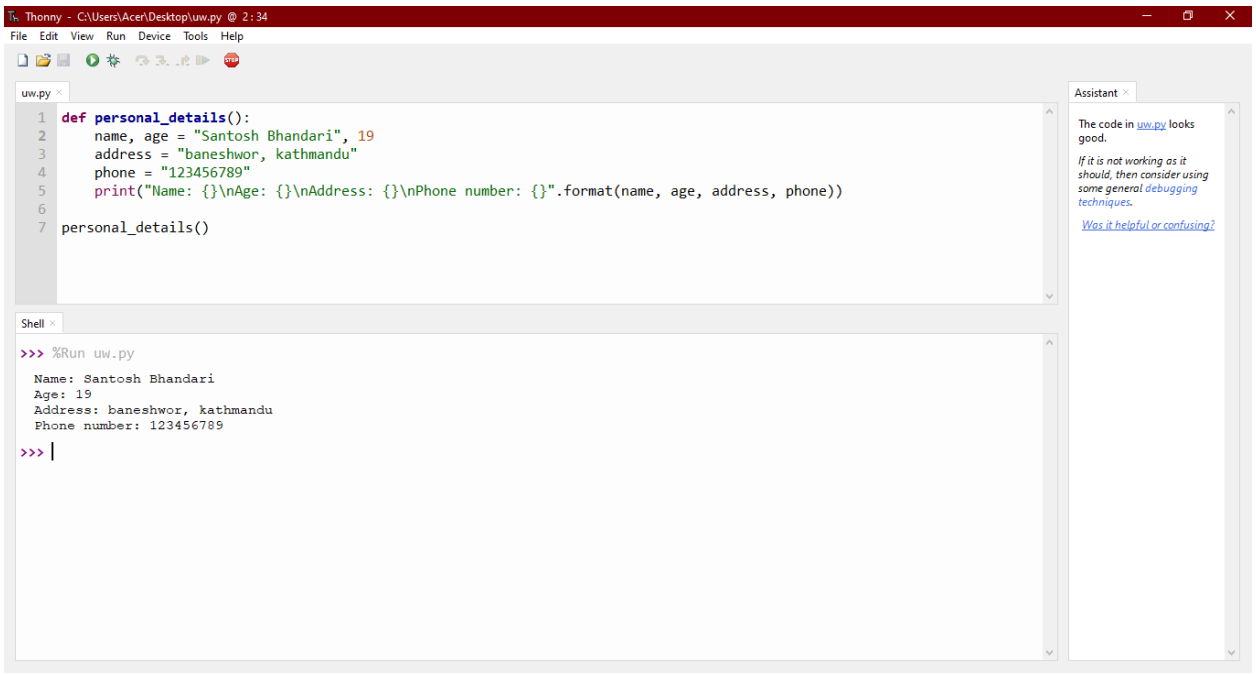
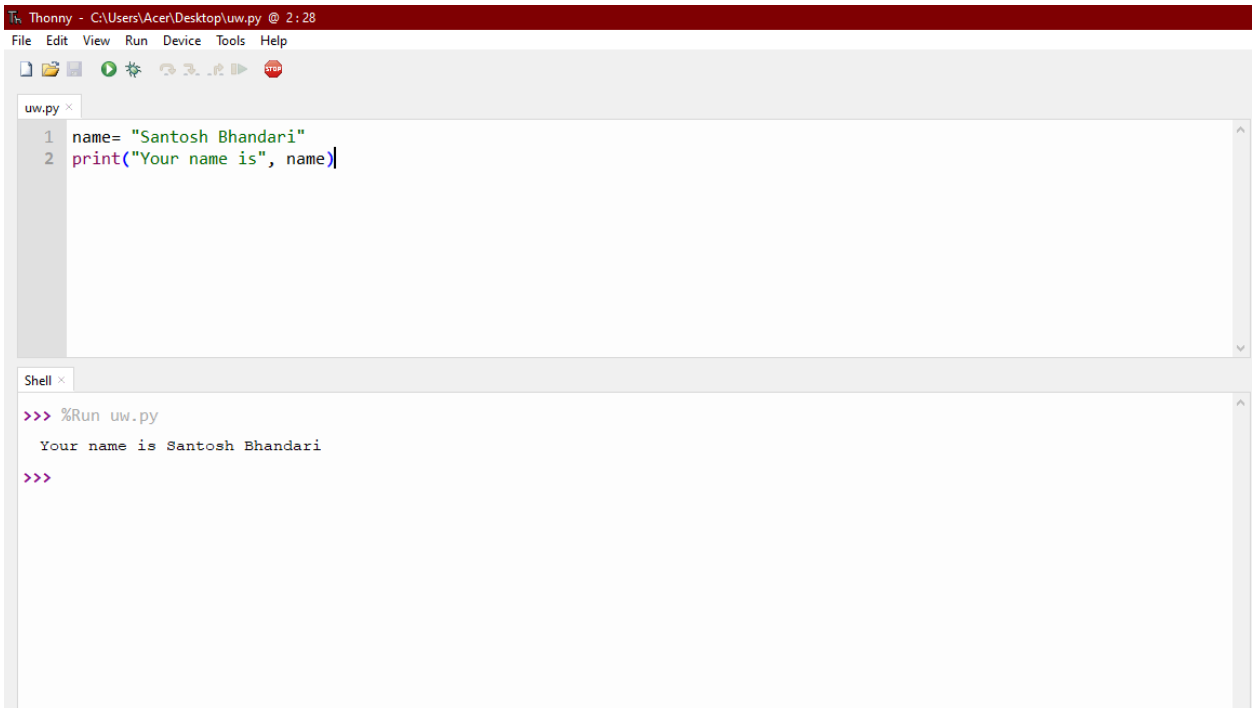
QN. 1


IDLE Shell 3.9.2
File Edit Shell Debug Options Window Help
Python 3.9.2 (tags/v3.9.2:1a79785, Feb 19 2021, 13:44:55) [MSC v.1928 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> 8*2
16
>>> 8**2
64
>>> 8/12
0.6666666666666666
>>> 8//12
0
>>> 8/0
Traceback (most recent call last):
File "<pyshell#4>", line 1, in <module>
8/0
ZeroDivisionError: division by zero
>>>
Ln: 16 Col: 4

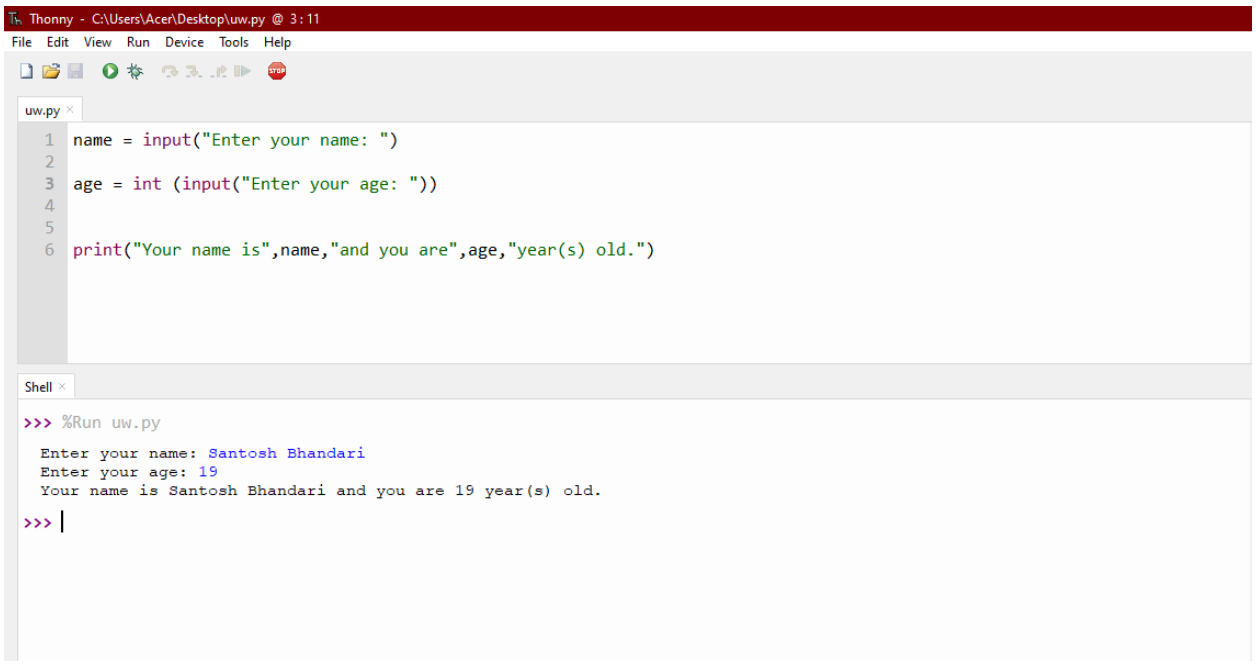
QN.2


Thonny - C:\Users\Acer\Desktop\uw.py @ 2 : 34
File Edit View Run Device Tools Help
uw.py
1 def personal_details():
2 name, age = "Santosh Bhandari", 19
3 address = "baneshwor, kathmandu"
4 phone = "123456789"
5 print("Name: {}\nAge: {}\nAddress: {}\nPhone number: {}".format(name, age, address, phone))
6
7 personal_details()
Assistant
The code in uw.py looks good.
If it is not working as it should, then consider using some general debugging techniques.
Was it helpful or confusing?
Shell
>>> %Run uw.py
Name: Santosh Bhandari
Age: 19
Address: baneshwor, kathmandu
Phone number: 123456789
>>>

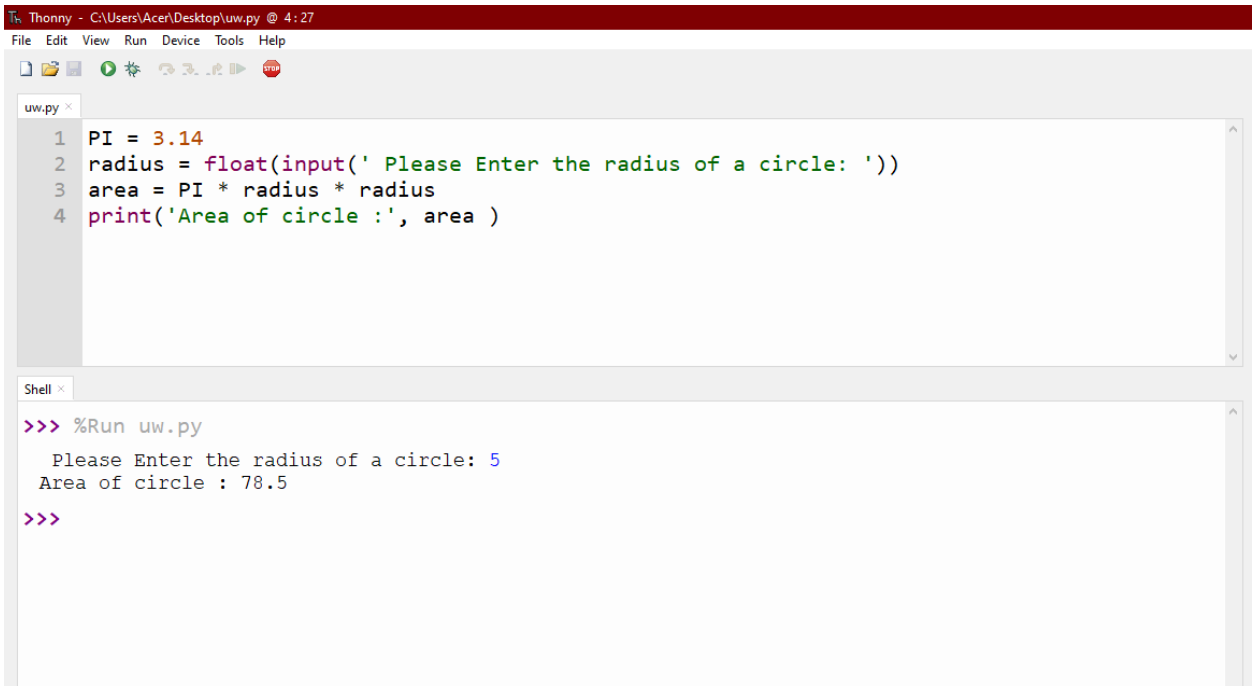
QN. 3


Thonny - C:\Users\Acer\Desktop\uw.py @ 2 : 28
File Edit View Run Device Tools Help
uw.py
1 name= "Santosh Bhandari"
2 print("Your name is", name)
Shell
>>> %Run uw.py
Your name is Santosh Bhandari
>>>

Qn. 4



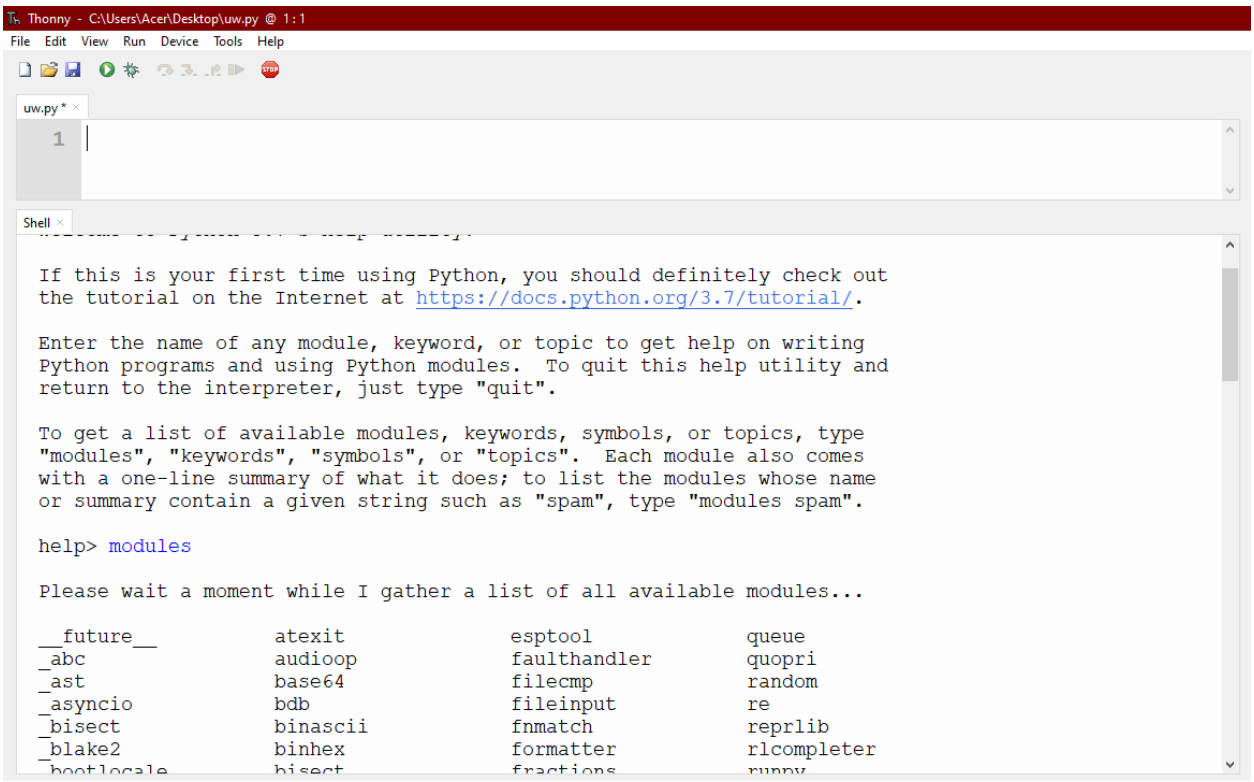
Qn. 5



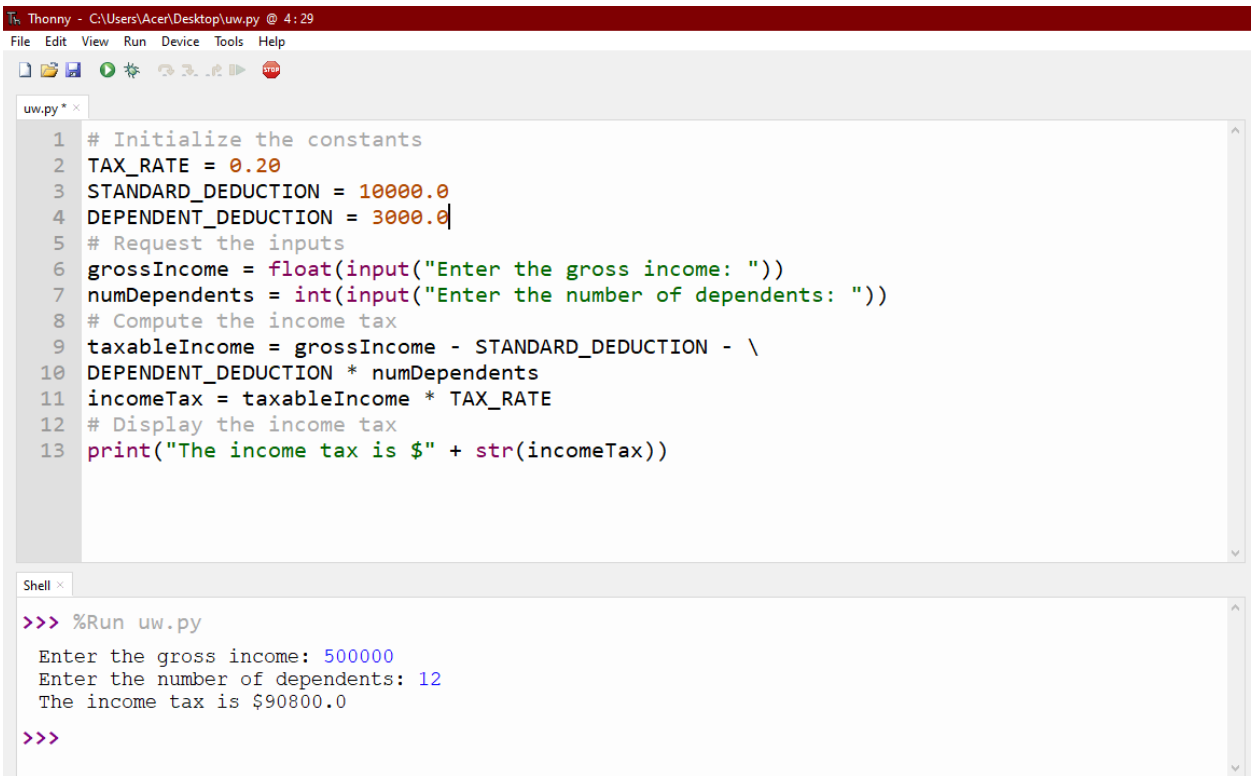
Qn. 6

Explanation: This gives error at line num= num + 1 as cannot convert int object to str implicitly

Qn. 7


Thonny - C:\Users\Acer\Desktop\uw.py @ 1 : 1
File Edit View Run Device Tools Help
uw.py *
1
Shell
If this is your first time using Python, you should definitely check out
the tutorial on the Internet at https://docs.python.org/3.7/tutorial/.
Enter the name of any module, keyword, or topic to get help on writing
Python programs and using Python modules. To quit this help utility and
return to the interpreter, just type "quit".
To get a list of available modules, keywords, symbols, or topics, type
"modules", "keywords", "symbols", or "topics". Each module also comes
with a one-line summary of what it does; to list the modules whose name
or summary contain a given string such as "spam", type "modules spam".
help> modules
Please wait a moment while I gather a list of all available modules...
__future__ atexit esptool queue
_abc audioop faulthandler quopri
_ast base64 filecmp random
_asyncio bdb fileinput re
_bisect binascii fnmatch reprlib
_blake2 binhex formatter rlcompleter

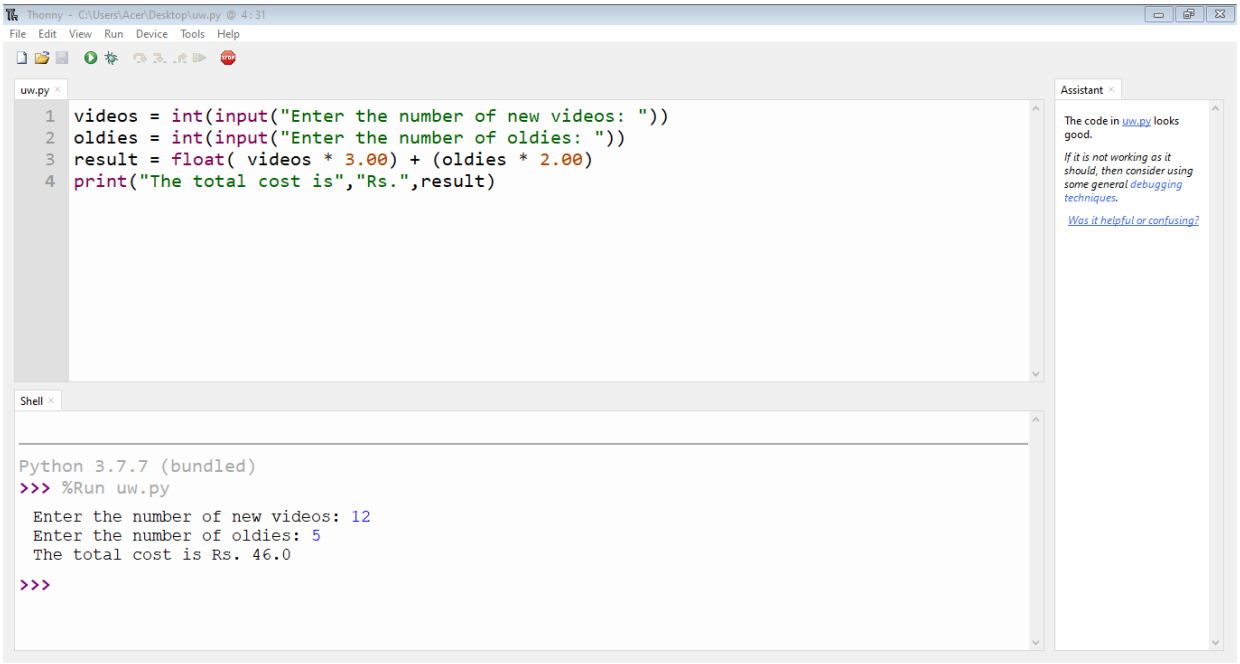
Qn. 8


Thonny - C:\Users\Acer\Desktop\uw.py @ 4 : 29
File Edit View Run Device Tools Help
uw.py *
1 # Initialize the constants
2 TAX_RATE = 0.20
3 STANDARD_DEDUCTION = 10000.0
4 DEPENDENT_DEDUCTION = 3000.0
5 # Request the inputs
6 grossIncome = float(input("Enter the gross income: "))
7 numDependents = int(input("Enter the number of dependents: "))
8 # Compute the income tax
9 taxableIncome = grossIncome - STANDARD_DEDUCTION - \
10 DEPENDENT_DEDUCTION * numDependents
11 incomeTax = taxableIncome * TAX_RATE
12 # Display the income tax
13 print("The income tax is $" + str(incomeTax))
Shell
>>> %Run uw.py
Enter the gross income: 500000
Enter the number of dependents: 12
The income tax is $90800.0
>>>

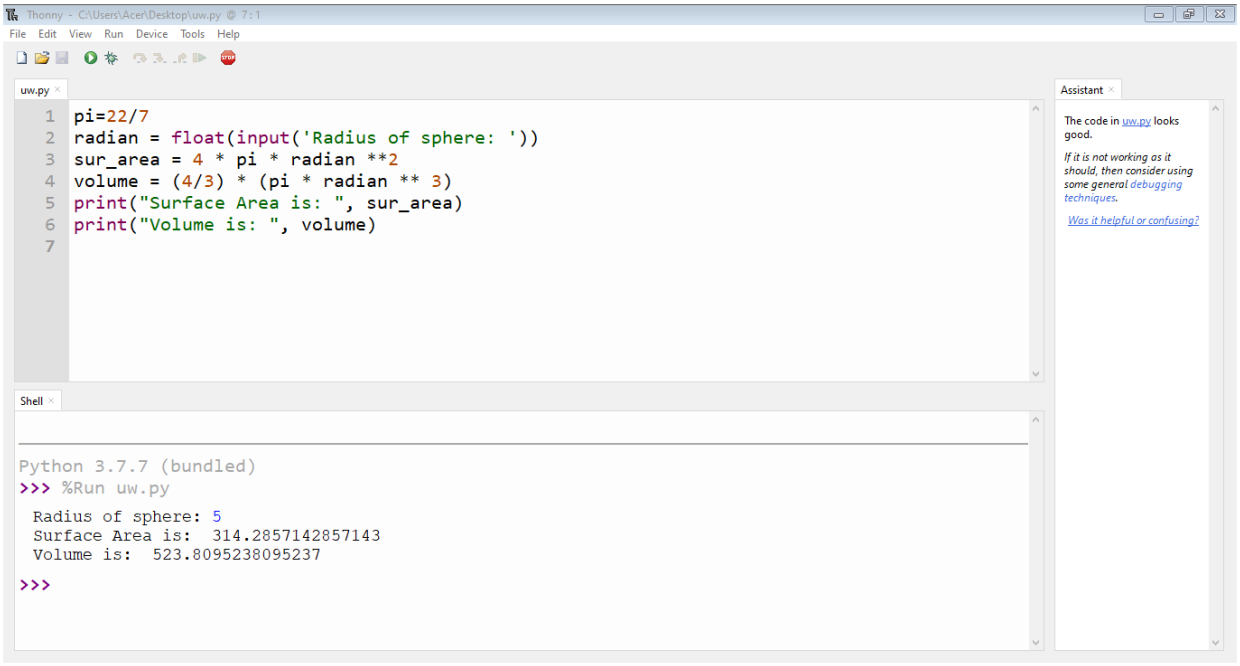
Qn. 9


Thonny - C:\Users\Acer\Desktop\uw.py @ 5 : 34
File Edit View Run Device Tools Help
uw.py
1 edge = float(input("Edge Length: "))
2
3 area = 6 * edge**2
4
5 print("Surface Area: "+str(area))
Shell
Python 3.7.7 (bundled)
>>> %Run uw.py
Edge Length: 12
Surface Area: 864.0
>>>

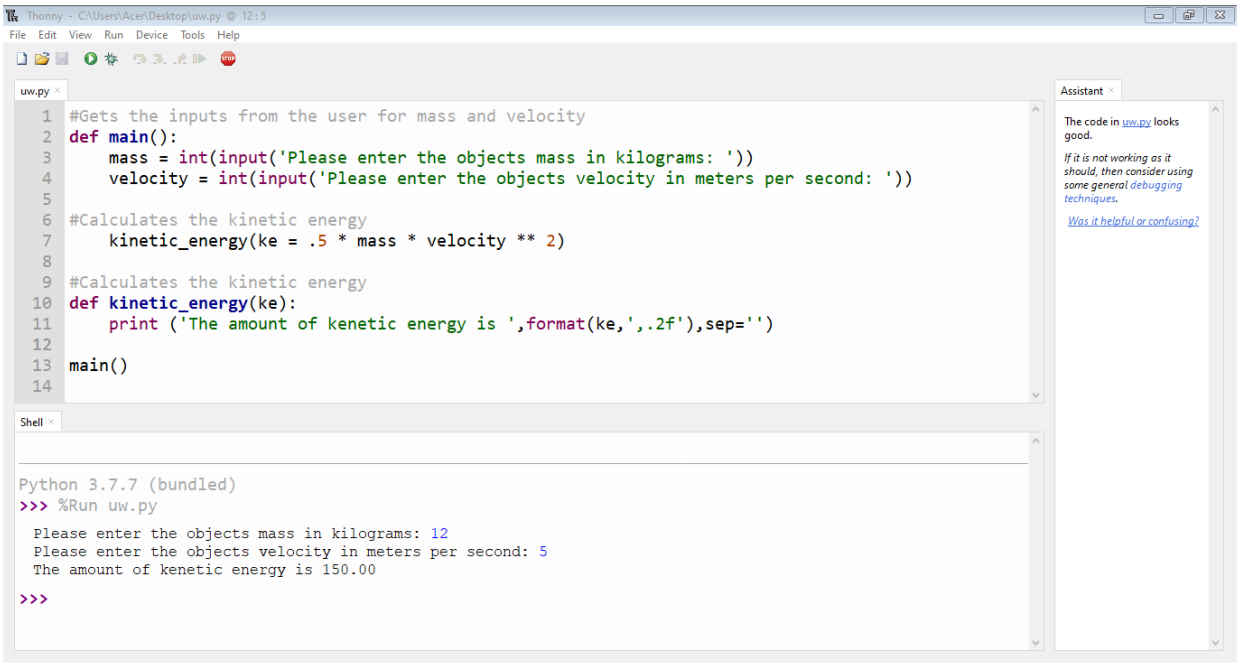
QN. 10


Thonny - C:\Users\Acer\Desktop\uw.py @ 4 : 31
File Edit View Run Device Tools Help
uw.py
1 videos = int(input("Enter the number of new videos: "))
2 oldies = int(input("Enter the number of oldies: "))
3 result = float(videos * 3.00) + (oldies * 2.00)
4 print("The total cost is","Rs.",result)
Assistant
The code in uw.py looks good.
If it is not working as it should, then consider using some general debugging techniques.
Was it helpful or confusing?
Shell
Python 3.7.7 (bundled)
>>> %Run uw.py
Enter the number of new videos: 12
Enter the number of oldies: 5
The total cost is Rs. 46.0
>>>

QN. 11


Thonny - C:\Users\Acer\Desktop\uw.py @ 7 : 1
File Edit View Run Device Tools Help
uw.py
1 pi=22/7
2 radian = float(input('Radius of sphere: '))
3 sur_area = 4 * pi * radian **2
4 volume = (4/3) * (pi * radian ** 3)
5 print("Surface Area is: ", sur_area)
6 print("Volume is: ", volume)
7
Assistant
The code in uw.py looks good.
If it is not working as it should, then consider using some general debugging techniques.
Was it helpful or confusing?
Shell
Python 3.7.7 (bundled)
>>> %Run uw.py
Radius of sphere: 5
Surface Area is: 314.2857142857143
Volume is: 523.8095238095237
>>>

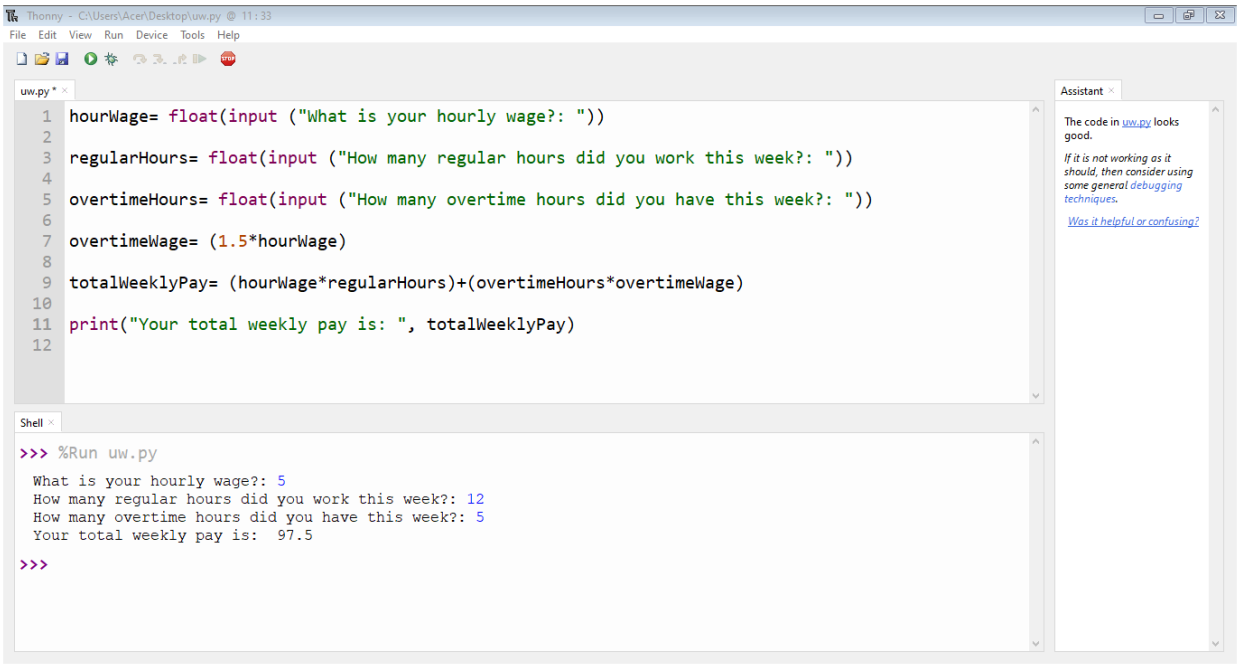
QN. 12


Thonny - C:\Users\Acer\Desktop\uw.py @ 12 : 5
File Edit View Run Device Tools Help
uw.py
1 #Gets the inputs from the user for mass and velocity
2 def main():
3 mass = int(input('Please enter the objects mass in kilograms: '))
4 velocity = int(input('Please enter the objects velocity in meters per second: '))
5
6 #Calculates the kinetic energy
7 kinetic_energy(ke = .5 * mass * velocity ** 2)
8
9 #Calculates the kinetic energy
10 def kinetic_energy(ke):
11 print ('The amount of kenetic energy is ',format(ke,',.2f'),sep='')
12
13 main()
14
Assistant
The code in uw.py looks good.
If it is not working as it should, then consider using some general debugging techniques.
Was it helpful or confusing?
Shell
Python 3.7.7 (bundled)
>>> %Run uw.py
Please enter the objects mass in kilograms: 12
Please enter the objects velocity in meters per second: 5
The amount of kenetic energy is 150.00
>>>

QN. 13


Thonny - C:\Users\Acer\Desktop\uw.py @ 12 : 1
File Edit View Run Device Tools Help
uw.py
1 mass = float(input("Mass: "))
2
3 velocity = float(input("Velocity: "))
4
5 KE = 0.5 * mass * velocity**2
6
7 momentum = mass * velocity
8
9 print("The object's momentum is "+str(momentum))
10
11 print("The object's kinetic energy is "+str(KE))
12
Shell
>>> %Run uw.py
Mass: 5
Velocity: 5
The object's momentum is 25.0
The object's kinetic energy is 62.5
>>>

Qn. 14


Thonny - C:\Users\Acer\Desktop\uw.py @ 11 : 33
File Edit View Run Device Tools Help
uw.py *
1 hourWage= float(input ("What is your hourly wage?: "))
2
3 regularHours= float(input ("How many regular hours did you work this week?: "))
4
5 overtimeHours= float(input ("How many overtime hours did you have this week?: "))
6
7 overtimeWage= (1.5*hourWage)
8
9 totalWeeklyPay= (hourWage*regularHours)+(overtimeHours*overtimeWage)
10
11 print("Your total weekly pay is: ", totalWeeklyPay)
12
Assistant
The code in uw.py looks good.
If it is not working as it should, then consider using some general debugging techniques.
Was it helpful or confusing?
Shell
>>> %Run uw.py
What is your hourly wage?: 5
How many regular hours did you work this week?: 12
How many overtime hours did you have this week?: 5
Your total weekly pay is: 97.5
>>>